

APPENDIX A - SUBMITTAL REQUIREMENTS

SPECIFICATIONS FOR SUBMITTAL DOCUMENTS, GENERALLY

Documents specified herein shall be submitted in accordance with the Subdivision Regulations and this Appendix, which may be modified at the discretion of the City Planner when applicable.

PLANS AND PLATS

- All plans and plats shall be prepared by a Registered Design Professional
- Submitted on 24" x 36" black or blueline prints with a portable document format (PDF) file of the hard copy and other such formats as the City Planner requires.
- Applicants shall also submit one (1) 11"X17" copy of the Master Plan, Sketch Plat, Preliminary Plat or Final Plat prepared in accordance with the requirements of this section.

DIGITAL FILES

- All Preliminary Plats, As-Builts and Final Plats must include the following digital submittals:
 - o A portable document format (PDF) file of the hard copy
 - o A georeferenced GIS shapefile (.SHP) or CAD drawing (.DWG) file, or equivalent
 - o SHP or DWG files must be georeferenced in Projected Coordinate System: NAD_1983_State Plane_Alabama_West_FIPS_0102_Feet.

CONSTRUCTION PLANS

- Construction plans shall be prepared by a Registered Professional Engineer actively licensed in the State of Alabama
- Submitted on sheets not larger than 24"x36"
- Shall include plans and profiles of all proposed infrastructure, including:
 - o Streets
 - o Sanitary sewer lines and facilities
 - o Stormwater structures
 - o Water lines, and
 - o Fire hydrants
- Construction plans shall reflect the approved Preliminary Plat and shall include sufficient data and calculations to allow verification of conformity to the requirements and specifications in these Regulations.

AS-BUILTS

- As-Built plans shall give details of construction and locations of the improvements which have been installed, including:
- the location, size, and design of underground utilities for the City's use in the course of maintaining such improvements.
- If the installation of improvements is completed under a bond, the engineering plan shall be submitted to the City upon request of release of the bond by the applicant.
- As-Built plans must be submitted in hard copy, no larger than 24"x36", and digital format.
- Digital format must include:
 - A portable document format (PDF) file of the hard copy, and
 - A GIS shapefile (.SHP) or CAD drawing (.DWG), or equivalent, georeferenced in Projected Coordinate System: NAD_1983_State Plane_Alabama_West_FIPS_0102_Feet
- As-Built Plans must contain adequate formatting and information to show the following:
 - Sewer main diameter, length, material, and slope are to be called out on the plan.
 - Sewer manhole and t-type cleanout rims and inverts are to be located horizontally and vertically. All as-built elevations to be shown.
 - Water main diameter, length, and material are to be called out. Show all laterals.
 - Water fire hydrants, valves (main & hydrant), plugs, air-release and blow-off stations are to be located horizontally and vertically. Documented or known changes in types, lengths of pipe, location, or any other changes to the water system shall be indicated.
 - Storm drainage pipe diameter, length, material, pipe invert and pipe outfall, and slope are to be called out.
 - Storm drainage manhole and t-type cleanout rims and inverts are to be located horizontally and vertically.
 - Storm drainage related catch basins, culverts, and outfalls are to be located horizontally and vertically.
 - Any other changes to the construction drawings should be noted and shown with a revision cloud.
- Digital file submittals must include a portable document format (PDF) file of the hard copy and

SKETCH PLAT

Submittal Requirements for Sketch Plat

The Sketch Plat is intended to be a relatively simple conceptual drawing of the proposed subdivision, submitted prior to the preparation of the Preliminary Plat to enable the applicant to save time and expense in reaching general agreement with the Planning Commission as to the form of the plat and the objectives of these regulations.

Applicants shall submit the following:

- Pre-Application Conference Request*
- Sketch Plat Application*
- Applicable Fee in accordance with established fee schedule adopted by City Council
- Sketch Plat - Four (4) sets of legible prints, not to exceed 24" x 36", and a digital format submitted to COBM_Planning@cityofbayminetteal.gov

**Required for Major Subdivisions, Optional for Minor*

A sketch plat should contain the following information:

- Name, address, and phone number of the applicant and the agent preparing the sketch plat
- Graphic scale and north arrow
- Proposed land uses
- Proposed name of subdivision
- Current zoning and district lines
- Total acreage of the site
- Proposed lot lines and approximate dimensions
- Proposed utility and street locations with approximate dimensions
- Proposed parcels for open space or public use with approximate dimensions
- Approximate topography
- Any existing facilities on or adjacent to and within 660 feet of the parcel, including streets, utilities, or parks
- Any other information essential to the purpose for which the sketch plat will be used.

MASTER PLAN

Submittal Requirements for Master Plan

Where any subdivision or development site is to be developed in stages or phases, no Preliminary Plat for any fraction of the site shall be accepted for review unless a Master Plan is submitted or has been previously approved.

Applicants shall submit the following:

- Master Plan application
- Master Plan - Four (4) sets of legible prints, not to exceed 24" x 36", and a digital format submitted to COBM_Planning@cityofbayminetteal.gov

A Master Plan should contain the following:

- | | |
|---|---|
| <input type="checkbox"/> Conceptual plan showing the overall development concept for the site at build-out | <input type="checkbox"/> Streets |
| <input type="checkbox"/> Conceptual plan showing entire development site and all component stages or phases | <input type="checkbox"/> Sidewalks |
| <input type="checkbox"/> Graphic scale and north arrow | <input type="checkbox"/> Lot layout |
| <input type="checkbox"/> Total acreage of the site | <input type="checkbox"/> Drainage |
| <input type="checkbox"/> Proposed name of development | <input type="checkbox"/> Utilities |
| <input type="checkbox"/> Proposed Land Uses | <input type="checkbox"/> Detention Areas |
| <input type="checkbox"/> Proposed Density | <input type="checkbox"/> Common Areas |
| <input type="checkbox"/> Entrances | <input type="checkbox"/> Recreational Areas |
| <input type="checkbox"/> Exits | <input type="checkbox"/> Landscaped/Open Space |
| <input type="checkbox"/> Connectivity/Stub Outs | <input type="checkbox"/> Amenity/Public Use Areas |
| | <input type="checkbox"/> Any other information essential to the purpose for which the sketch plat will be used. |

If the Planning Director finds that any proposed preliminary plat substantially deviates from the approved master plan, a revised master plan must be approved by the Planning Commission prior to approval of further plats within the development. Examples of a substantial deviation includes an increase in the overall lot density; change in number of entrances, connections, or stub outs; decrease in proposed open space or amenity areas.

PRELIMINARY PLAT – MAJOR SUBDIVISIONS

The purpose of the Preliminary Plat is to provide a basis for construction of a proposed Major Subdivision and its improvements. The Preliminary Plat is intended to be a detailed presentation of the site and shall include engineering plans for the construction of all improvements.

To be submitted after the required Pre-Application Conference and Sketch Plat approval:

- A complete Preliminary Plat application
- Proof of ownership, such as a copy of a recorded warranty deed of the property proposed for development, or written permission from the property owner stating the applicant has the authority to act as agent on behalf of the owner.
- Four (4) sets of 24" x 36" prints of the proposed subdivision and construction plans prepared by a Alabama licensed professional engineer or land survey and in accordance with the requirements of Section 3.13 of the Subdivision Regulations
- One (1) 11" X 17" copy of the plat and
- Digital format of the plat and construction plans
- Documentation from all applicable utility companies detailing service availability, stating their capacity and willingness to provide service.
- List of adjacent property owners - Names and addresses shall be from the latest records of the Baldwin County Revenue Commissioner's Records and the accuracy of the list shall be the applicant's responsibility. Where land adjacent to the subject property involves leasehold property, the names and addresses of the landowner and the leasehold improvements shall be notified.
- Any applicable approvals from local, state and/or federal agencies
- Other documentation as deemed necessary by the Planning Director.
- Fees - To partially defray costs of filing a Preliminary Plat application, notifying interested parties, investigation, and holding a hearing on a Preliminary Plat, a fee according to the current schedule of fees established by the City Council of Bay Minette must be paid to the City by the Subdivider at the time of filing of the application. Fees are not subject to refund or adjustment, irrespective of the final outcome of the application.

Preliminary Plat shall be clearly and legibly drawn at a convenient scale of not less than one (1) inch equals one hundred (100) feet. Construction Plans shall be prepared by a Alabama licensed professional Engineer and drawn at a scale of not less than one (1) inch equals fifty (50) feet. All sheets shall be 24" x 36" and numbered in sequence if more than one (1) sheet is used

PRELIMINARY PLAT CONTENT:

- Name of owner(s) or record
- Proposed name of subdivision, date, north point, scale, and location
- Name of registered engineer and/or land surveyor
- Vicinity map showing location of the subdivision
- Exact boundaries of the tract of land being subdivided shown with bearings and distances
- Names and addresses of the owners of land immediately adjoining the tract of land being subdivided

- Wooded areas, marshes, and any other conditions affecting the site
- The location of existing streets, buildings, water courses, railroads, transmission lines, drainage structures, public utilities, jurisdiction lines, and any public utility easements on the tract being subdivided and on adjacent land within 100 feet of the tract being subdivided
- Proposed rights-of-way or easements including location, widths, purposes, and street names
- Proposed lot lines with bearings and distances, square footage or acreage of each and lot and block numbers
- Proposed minimum building setback lines
- Proposed parks, school sites, or other public open spaces, if any
- Site data:
 - Acreage in total tract
 - Smallest lot size
 - Total number of lots
 - Linear feet in streets
- Any area within 100 feet of the proposed subdivision subject to inundation by the 100-year flood as defined herein, or subject to periodic inundation by storm drainage overflow or ponding, shall be clearly shown and identified on the plat
- If all or any part of the proposed subdivision lies within an existing flood hazard zone as indicated on the latest Flood Insurance Rate Map (FIRM) for the area, a statement to that effect should be written on the Preliminary Plat and on the Final Plat
- North Point, graphic scale of not less than 1-inch equals 100 feet and date.
- Vicinity map showing location
- Name and address of the owner of record and subdivider
- Name and registration number of surveyor.
- Proposed name of subdivision and current parcel identification number(s).
- Legal Description and acreage
- Exact boundary lines of the tract by bearings and distance, also bearings and distance to the nearest established street lines or official monuments, location of concrete monuments, section corner accurately tied to the lines of the subdivision by distances and bearings to an adjacent plat which is tied to a section corner.
- Block letters and lot numbers.
- Names and addresses of owners of record of adjoining land with their approximate acreage.
- Existing streets, utilities and easements on and/or adjacent to the tract including the name, size and width of each; include buildings, water courses, transmission lines, drainage structures, public utilities, jurisdiction lines, public utility easements on or adjacent to the land within 100 feet.
- Location of existing fire hydrant(s) which would serve the proposed development.
- Proposed subdivision layout using contours of vertical intervals of not more than five (5) feet and including streets, alleys and easements (ingress/egress, drainage and/or utility) with both dimensions and proposed street names

- Land to be reserved or dedicated for public uses; and any land to be used for purposes other than single family dwellings. Common areas should be labeled with lot numbers, note indicating ownership and maintenance and note indicating that common areas are not intended to be buildable lots for conversion or residential use.
- Indication of zoning district boundaries and indicate the proposed use of all land within the subdivision as well as any restriction on the lots.
- Proposed lot lines with bearings and distances, square footage or acreage of each lot. Dimensions to the nearest one-hundredth (1/100) foot and bearings to the nearest second.
- Proposed building envelope with minimum building setback lines for each lot and clearly labeled on the plat.
- Site Data Table for residential development shall include the following at minimum:
 - Acreage in total tract;
 - Smallest lot size;
 - Total number of lots;
 - Total area and percentage of open space (recreation areas and other common areas-not detention/retention);
 - Zoning district;
 - Minimum building setbacks; and,
 - Minimum finished floor elevation of buildings
- Site Data Table for commercial development shall include the following at minimum:
 - Acreage in total tract;
 - Total number of lots;
 - Total area and percentage of open space (recreation areas and other common areas-not detention/retention);
 - Zoning district;
 - Minimum building setbacks; and,
 - Minimum finished floor elevation of buildings
- Identify low-lying lands along watercourses subject to flooding or overflowing during storm periods.
- Location of any wetlands, on-site waterbodies, swamps and land subject to flooding as determined from past history of flooding, and as delineated by the U.S.G.S. or U.S. Corp of Engineers. Any area within 100 feet of the proposed subdivision subject to inundation by the 100-year flood, or subject to periodic inundation by storm drainage overflow or ponding, shall be clearly shown and identified.
- Wooded areas, cultural resources and any other conditions affecting the site.
- Certifications showing:
 - Notarized proof of ownership of the land.
 - Surveyor's attest to the accuracy of the survey.
 - Compliance with applicable Board of Health Codes and Ordinances.
 - Granting of all easements included in the plat.
 - Signatory block for approval by the City of Bay Minette Planning Commission.
 - Provide lot restrictions or restrictive covenants when applicable.
 - Signatory block for approval by E-911 GIS/Addressing.
 - Signatory block(s) for Utility Providers

- Preliminary sketch plans of proposed utility layouts (sewer, water, gas and electricity) including pipe sizes and the location of valves and fire hydrants, and showing feasible connections where possible to existing and proposed utility systems.
- Preliminary plan of all drainage facilities
- Typical street cross-section and center-line profiles
- Location of streams, lakes, and swamps and land subject to flooding as determined from past history of flooding, and as delineated by the U.S.G.S or U.S. Corps of Engineers.
- Location of land dedicated for a neighborhood park or open space area for subdivisions exceeding fifty (50) lots.
- Soils in the area to be subdivided at a scale equal to that of the preliminary plat.
- Any other information that may be considered necessary by the committee for full and proper consideration of the proposed subdivision.
- Inscription saying "NOT FOR FINAL RECORDING".

PRELIMINARY PLAT CONSTRUCTION PLANS CONTENT:

- Shall be prepared by an Alabama licensed professional engineer
- Include construction plans for all required improvements that meet the minimum standards of design and general requirements for the construction of public improvements as set forth in the Subdivision Regulations
- Profiles of all proposed infrastructure, including
 - Streets
 - Sanitary Sewer Lines and Facilities
 - Stormwater Structures
 - Water Lines
 - Fire Hydrants
- Include sufficient data and calculations to allow verification of conformity to the requirements and specifications in these regulations
- Street Plan containing the following information:
 - Locations of all proposed and existing streets or rights-of-way in or adjacent to the subdivisions
 - Width of existing and proposed rights-of-way and easements
 - Street names
 - Plan and Profile of all streets, showing natural and finished grades drawn to scale of not less than one (1) inch equals one hundred (100) feet horizontal and one (1) inch equals ten (10) feet vertical
 - Cross sections of proposed streets at a minimum of 100-foot stations
 - Curve data for the centerline of each street: Delta, Tangent, and Radius
 - Location of all required sidewalks and crosswalks
- Storm Drainage Plan containing the following information:
 - Location of proposed drainage ways, streams, and ponds in the subdivision
 - Topography at two-foot contour intervals; on more severe terrain, greater intervals may be accepted

- Location, size, and invert elevations of existing and proposed drainage structures including culverts, bridges, pipes, drop inlets, and top elevations of head walls, etc., showing details on Drainage plan, including conduit schedule
 - Construction details of typical manholes, connections, and other drainage structures proposed
 - Area of land contributing run-off to each drainage structure along with run-off calculations of each area and drainage calculations for each drainage structure and drainage ditch
 - Location of easements and rights-of-way for drainage ways and maintenance access thereof
 - Typical cross sections of each drainage way
 - Direction of stormwater flow throughout subdivision and compatibility with existing drainage
- Sanitary Sewer Plan, if applicable, containing the following information:
 - Location and size of all existing and proposed sewers in the subdivision and tie-points of the subdivision. Location of sewer laterals
 - Direction of flow of each sewer line
 - Location of each manhole and other sewage system appurtenances including lift stations, oxidation ponds, and treatment plants, if any
 - Construction details of typical manholes, connections, and other sewage structures proposed
 - Plan and profile of sewage system
- Water Distribution Plan containing the following information:
 - Location and size of existing and proposed water distribution system including pipes, valves, fittings, hydrants, high pressure pumping equipment, etc
- Electric Distribution Plan containing the following information:
 - Location of existing and proposed poles or subsurface facilities, as detailed by the Utility Provider, as necessary to serve each lot or parcel of land within the subdivision
- Gas Distribution Plan showing the following information (if applicable):
 - Location and size of existing and proposed gas distribution lines including pipes, valves and fittings
- Approvals
 - No Preliminary Plat shall be approved by the Planning Commission until each utility affected has submitted a letter to the Planning Commission as to whether the service to be provided by such utility is reasonable and adequate.

FINAL PLAT – MINOR SUBDIVISIONS

The Final Plat for Minor Subdivisions shall contain the following information:

- North Point, graphic scale of not less than 1-inch equals 100 feet and date.
- Vicinity map showing location
- Name and address of the owner of record and subdivider
- Name and registration number of surveyor.
- Proposed name of subdivision and current parcel identification number(s).
- Legal Description and acreage
- Exact boundary lines of the tract by bearings and distance, also bearings and distance to the nearest established street lines or official monuments, location of concrete monuments, section corner accurately tied to the lines of the subdivision by distances and bearings to an adjacent plat which is tied to a section corner.
- Block letters and lot numbers.
- Names and addresses of owners of record of adjoining land with their approximate acreage.
- Existing streets, utilities and easements on and/or adjacent to the tract including the name, size and width of each; include buildings, water courses, transmission lines, drainage structures, public utilities, jurisdiction lines, public utility easements on or adjacent to the land within 100 feet.
- Location of existing fire hydrant(s) which would serve the proposed development.
- Proposed subdivision layout using contours of vertical intervals of not more than five (5) feet and including streets, alleys and easements (ingress/egress, drainage and/or utility) with both dimensions and proposed street names
- Land to be reserved or dedicated for public uses; and any land to be used for purposes other than single family dwellings. Common areas should be labeled with lot numbers, note indicating ownership and maintenance and note indicating that common areas are not intended to be buildable lots for conversion or residential use.
- Indication of zoning district boundaries and indicate the proposed use of all land within the subdivision as well as any restriction on the lots.
- Proposed lot lines with bearings and distances, square footage or acreage of each lot. Dimensions to the nearest one-hundredth (1/100) foot and bearings to the nearest second.
- Proposed building envelope with minimum building setback lines for each lot and clearly labeled on the plat.
- Site Data Table for residential development shall include the following at minimum:
 - o Acreage in total tract;
 - o Smallest lot size;
 - o Total number of lots;
 - o Total area and percentage of open space (recreation areas and other common areas-not detention/retention);
 - o Zoning district;
 - o Minimum building setbacks; and,

- Minimum finished floor elevation of buildings
- Site Data Table for commercial development shall include the following at minimum:
 - Acreage in total tract;
 - Total number of lots;
 - Total area and percentage of open space (recreation areas and other common areas-not detention/retention);
 - Zoning district;
 - Minimum building setbacks; and,
 - Minimum finished floor elevation of buildings
- Identify low-lying lands along watercourses subject to flooding or overflowing during storm periods.
- Location of any wetlands, on-site waterbodies, swamps and land subject to flooding as determined from past history of flooding, and as delineated by the U.S.G.S. or U.S. Corp of Engineers. Any area within 100 feet of the proposed subdivision subject to inundation by the 100-year flood, or subject to periodic inundation by storm drainage overflow or ponding, shall be clearly shown and identified.
- Wooded areas, cultural resources and any other conditions affecting the site.
- Certifications showing:
 - Notarized proof of ownership of the land.
 - Surveyor's attest to the accuracy of the survey.
 - Compliance with applicable Board of Health Codes and Ordinances.
 - Granting of all easements included in the plat.
 - Signatory block for approval by the City of Bay Minette Planning Commission.
 - Provide lot restrictions or restrictive covenants when applicable.
 - Signatory block for approval by E-911 GIS/Addressing.
 - Signatory block(s) for Utility Providers

FINAL PLAT – MAJOR SUBDIVISIONS

Submittal Requirements for Final Plat:

- A complete application on such forms provided by the Planning and Development Services Department.
- Proof of ownership, such as a copy of a recorded warranty deed of the property proposed for development, or written permission from the property owner stating the applicant has the authority to act as agent on behalf of the owner.
- Four (4) large-format and an electronic version of the proposed Final Plat and subdivision construction plans prepared in accordance with the plat requirements herein.
- Documentation from all applicable utility companies detailing service availability and willingness to provide service.
- Application Fee in accordance with the established fee schedule adopted by the City Council.
- Other documentation as deemed necessary by the City Planner

The Final Plat for Major Subdivisions shall contain the following information:

- North Point, graphic scale of not less than 1-inch equals 100 feet and date.
- Vicinity map showing location
- Name and address of the owner of record and subdivider
- Name and registration number of surveyor.
- Proposed name of subdivision and current parcel identification number(s).
- Legal Description and acreage
- Exact boundary lines of the tract by bearings and distance, also bearings and distance to the nearest established street lines or official monuments, location of concrete monuments, section corner accurately tied to the lines of the subdivision by distances and bearings to an adjacent plat which is tied to a section corner.
- Block letters and lot numbers.
- Names and addresses of owners of record of adjoining land with their approximate acreage.
- Existing streets, utilities and easements on and/or adjacent to the tract including the name, size and width of each; include buildings, water courses, transmission lines, drainage structures, public utilities, jurisdiction lines, public utility easements on or adjacent to the land within 100 feet.
- Location of existing fire hydrant(s) which would serve the proposed development.
- Proposed subdivision layout using contours of vertical intervals of not more than five (5) feet and including streets, alleys and easements (ingress/egress, drainage and/or utility) with both dimensions and proposed street names
- Land to be reserved or dedicated for public uses; and any land to be used for purposes other than single family dwellings. Common areas should be labeled with lot numbers, note indicating ownership and maintenance and note indicating that common areas are not intended to be buildable lots for conversion or residential use.
- Indication of zoning district boundaries and indicate the proposed use of all land within the subdivision as well as any restriction on the lots.

- Proposed lot lines with bearings and distances, square footage or acreage of each lot. Dimensions to the nearest one-hundredth (1/100) foot and bearings to the nearest second.
- Proposed building envelope with minimum building setback lines for each lot and clearly labeled on the plat.
- Site Data Table for residential development shall include the following at minimum:
 - Acreage in total tract;
 - Smallest lot size;
 - Total number of lots;
 - Total area and percentage of open space (recreation areas and other common areas-not detention/retention);
 - Zoning district;
 - Minimum building setbacks; and,
 - Minimum finished floor elevation of buildings
- Site Data Table for commercial development shall include the following at minimum:
 - Acreage in total tract;
 - Total number of lots;
 - Total area and percentage of open space (recreation areas and other common areas-not detention/retention);
 - Zoning district;
 - Minimum building setbacks; and,
 - Minimum finished floor elevation of buildings
- Identify low-lying lands along watercourses subject to flooding or overflowing during storm periods.
- Location of any wetlands, on-site waterbodies, swamps and land subject to flooding as determined from past history of flooding, and as delineated by the U.S.G.S. or U.S. Corp of Engineers. Any area within 100 feet of the proposed subdivision subject to inundation by the 100-year flood, or subject to periodic inundation by storm drainage overflow or ponding, shall be clearly shown and identified.
- Wooded areas, cultural resources and any other conditions affecting the site.
- Certifications showing:
- Notarized proof of ownership of the land.
- Surveyor's attest to the accuracy of the survey.
- Compliance with applicable Board of Health Codes and Ordinances.
- Granting of all easements included in the plat.
- Signatory block for approval by the City of Bay Minette Planning Commission.
- Provide lot restrictions or restrictive covenants when applicable.
- Signatory block for approval by E-911 GIS/Addressing.
- Signatory block(s) for Utility Providers
- Preliminary sketch plans of proposed utility layouts (sewer, water, gas and electricity) including pipe sizes and the location of valves and fire hydrants, and showing feasible connections where possible to existing and proposed utility systems.
- Preliminary plan of all drainage facilities.
- Typical street cross-section and center-line profiles.

- Location of streams, lakes, and swamps and land subject to flooding as determined from past history of flooding, and as delineated by the U.S.G.S or U.S. Corps of Engineers.
- Location of land dedicated for a neighborhood park or open space area for subdivisions exceeding fifty (50) lots.
- Soils in the area to be subdivided at a scale equal to that of the preliminary plat.
- Any other information that may be considered necessary by the committee for full and proper consideration of the proposed subdivision.

ENGINEERING PLANS

The developer or contractor shall submit detailed drainage plans and drainage calculations to the City for review and approval for all commercial developments and subdivisions. Said plans shall be prepared by a Licensed Professional Engineer registered in the State of Alabama and shall contain the following information.

- Topography map of proposed developed areas.
- Existing and proposed contours at sufficient intervals, usually 2 feet if not over 5%.
- Existing drainage system, effecting the proposed development or subdivision.
- Proposed drainage system, including onsite and offsite drainage areas.
- Structure location, type and size, and slope, cfs, Inlet El., Outlet El., Velocity, Headwater El., Tailwater El.
- Discharge quantities, pre and post runoff cfs.
- Other pertinent information necessary for review of the drainage plans as may be required by the City Planner
- Erosion and sediment control plan.
- Description of natural water body to receive the site runoff.
- Inlets
 - Inlets shall be provided so that surface water is not carried across any intersection or for a distance of more than 600 feet in the gutter unless approved by the Public Works Director.
 - When calculations indicate that curb capacities are exceeded at a point, catch basins shall be used to intercept flow at that point.
- Culverts
 - All roadway cross drain pipes shall be reinforced concrete and have a minimum size of 18 inches. Only pipe that meets specifications equaling ALDOT Specifications will be acceptable.
 - Culverts under arterial roadways shall normally accommodate a minimum of 25-year frequency design storm. Conditions may dictate that 100-year design storms must be accommodated.
 - Culverts under all other roadways shall normally accommodate a minimum of a 10-year storm.
 - Design storm criteria will be used by the Design Engineer based on the site-specific conditions that warrant life and property protection.
 - All types of culverts within the rights-of-way of public roads must be approved by the City Engineer and shall conform to ALDOT Standards.
- Culverts shall be placed in excavated trenches to the line and grade shown on the plans. The maximum width of the excavated trenches shall not exceed the outside diameter of the pipe by more than 1.5 feet on either side of the pipe.
 - Material used for backfilling culvert trenches shall consist of small diameter uniform material and shall be free of large rock or other unsuitable material. The backfill material shall be placed in uniform 8-inch lifts and mechanically compacted to 95% of relative density. The backfill shall be placed uniformly on each side of the pipe and all pipes shall be laid in accordance with City Standards.
 - A minimum of 12 inches cover shall be placed over each culvert pipe 48 inches or less in diameter and 24 inches or more of cover shall be placed on all larger diameter pipes.
 - When a battery of pipes is used, a clear spacing of 1/2 the pipe diameter shall be provided between adjacent pipes.
 - The maximum cover allowed, pipe class, and strength requirements shall be in accordance with the manufacturer's recommendation.

- The velocity of the flow in culverts shall be calculated using ranges from the latest edition of the ALDOT Hydraulics Manual.
- Bridges
 - Bridges shall accommodate a minimum of a 50-year frequency design storm. Conditions may dictate that of a 100-year frequency design storm.
- Open Channels and Ditches
 - Open channels and ditches shall be designed so as not to create a traffic hazard or create hazardous erosion.
 - The minimum flow line slope for paved ditches shall be 0.3% and shall be a maximum of 1% for unpaved ditches.
 - The recommended maximum flow velocities shall be in accordance with the ranges recommended in the latest edition of the ALDOT Hydraulics Manual.
 - Cleanout accesses shall be provided at least every 300 feet for continuous pipes of 24 inches in diameter or less and at least every 400 feet for larger continuous pipes if required. Clean out accesses are also required at each angle point and at each change in grade in the pipe.
- Storm Runoff Estimates
 - Basic design data and calculations shall be prepared, sealed and submitted by a registered professional engineer in the State of Alabama for the developer, contractor or owner.
 - The method of determining storm runoff shall be based on acceptable engineering practice and/or these standards.
- For small basins, up to 200 acres, the Rational Method ($Q=cia$) may be used.
 - Q = estimated peak discharge in cubic feet per second.
 - c = runoff coefficient (to be taken from the table below).
 - I = rainfall intensity in inches per hour for a design storm derived from the time of concentration
 - a = runoff area in acres
- Recommended "C" Values
 - Flat or Rolling Terrain
 - Farmland 0.20 to 0.40
 - Barren 0.40 to 0.65
 - Irrigated 0.40 to 0.55
 - Streets and Parking Lots
 - Unpaved 0.60 to 0.80
 - Paved 0.80 to 1.00
 - Improvements
 - Buildings 0.80 to 0.95
 - Lawns 0.25 to 0.40
- Special Construction
 - Concrete Box Culverts. Concrete box culverts used as culverts shall be designed and constructed according to the latest edition of the Standards and Specifications for Road and Bridge Construction, ALDOT.
 - Headwalls and Riprap. Concrete headwalls shall be required on all culverts, and head walls shall have a minimum slope of 3:1. Special types of headwalls may be required by the City when deemed necessary for erosion control. Riprap may be required at the upstream and downstream ends of

culverts and shall be placed at these locations based on the velocities at these locations. Culverts placed within the state of Alabama's right-of-way shall be permitted by ALDOT.